

# PJM, Demand Response and Distributed Generation

Virginia Distributed Generation Workshop  
June 5, 2003



- Non-discriminatory access to transmission
- Operation of market (day-ahead and daily) that provides reliability plus benefits of market
- Interconnection and facility upgrades by entity without a financial stake in outcome
- Information necessary for market participation
  - Prices, load forecasts, system conditions, etc.

- Information assists non-incumbents
- Allows for comparison of prices
- Provides incumbents with additional markets
- Access to multiple buyers and sellers
- Eliminate conflicts of interest
- Market provides opportunities to alternative generation

- Large Gen: Deposit, timelines for completion of studies, PJM verified costs
- Below 10 MW:
  - Expedited process
  - Based on queue
  - Deposit waived
  - “Super expedited” process available in some instances

- “Modern Market” begins in 1997
  - Marginal clearing price for entire region did not provide incentive for generation
  - Locational Marginal Price (LMP) incents production where it is most valued
- Focus on Energy Markets first
- Focus later on ancillary markets and facilitating demand response

- Recognition that PJM needs to better facilitate demand response
  - Necessary corollary to distributed generation
  - 200 MW program for 2003
- Developing interconnection procedures for “behind the meter” generation
  - Stakeholder process underway now
- Next step is to develop procedures for small gen to play in market
  - Make “plug and play” as much as possible

- July 2002: Dominion and AEP opt to join PJM
- PJM works with Dominion and AEP on integration plans
- December 2002: PJM files integration proposal at FERC
  - Integration in 2003

- January 2003: SCC report expresses concerns on RTO membership
- February 2003: Legislature delays timeline for joining RTOs (no earlier than summer 2004)
- PJM working with all concerned Virginia entities to answer issues pertaining to RTO membership
  - Released cost-benefit study
  - Will work with SCC on its cost-benefit approach



- Broad wholesale market that increases opportunities for all participants
  - Customers ultimate winners
- Coordination with adjoining markets (e.g., Midwest, Southeast, Northeast) to further expand opportunities
- Allow for Demand Response and Distributed Generation to provide multiple products (reserves, etc)
- Deep, liquid market composed of both supply and demand resources